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ABSTRACT

This monograph describes a practical, low cost needs assessment process used by Broward Community College (Florida) in cooperation with the public school system. The assessment was initiated by college administrators who needed information to plan appropriate programs and services for the residents living in a newly created service area. The material in the document is organized in three major areas: background of the problem, the needs assessment process, and conclusions. The background setting describes the general environmental factors surrounding the needs assessment study, including demographic considerations, the need for information, and preliminary plans for implementing the needs assessment project. The needs assessment process includes a step by step review of the procedure, the rationale, and significant observations. Aspects of the process include: (1) assessing resources; (2) reviewing other assessment projects; (3) establishing a survey team; (4) meeting with key groups; (5) developing a research design (population stratification, selecting the sample, and collection of data); and (6) holding a meeting after completion of the survey. The conclusions reflect on the outcomes and the significance of the process. Data tables outline demographic information. The survey instrument and a bibliography are appended. (Author/MB)

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COMMUNITY COLLEGES

COMMUNITY EDUCATION

Monograph #3

ASSESSING THE EDUCATIONALLY RELATED NEEDS OF ADULTS: A PRACTICAL, LOW COST APPROACH

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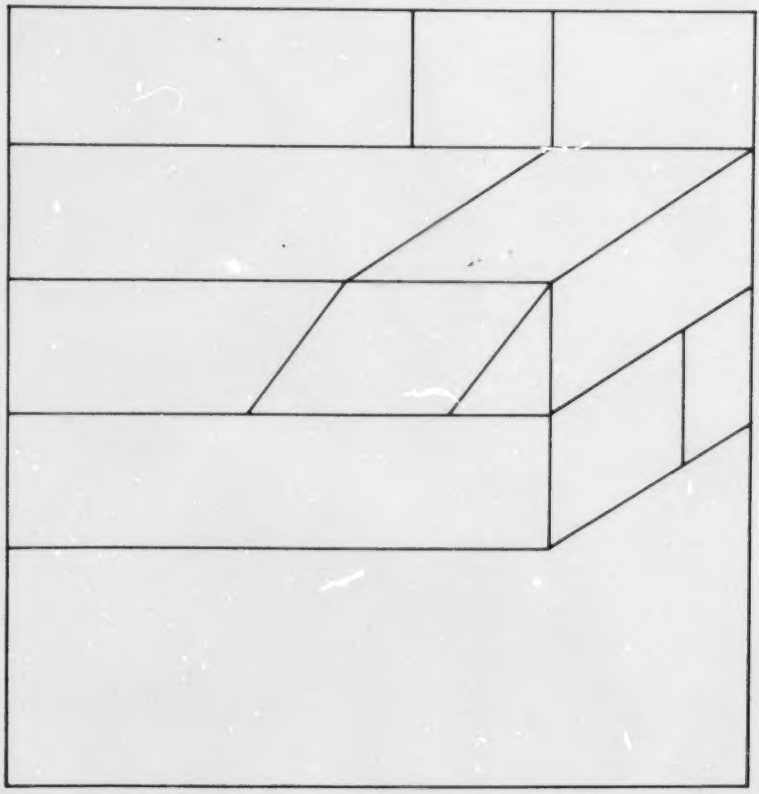
AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

ASSESSING THE EDUCATIONALLY RELATED NEEDS OF ADULTS: A PRACTICAL, LOW COST APPROACH BY A COMMUNITY COLLEGE IN COOPERATION WITH THE PUBLIC SCHOOL SYSTEM

Sandra C. Grady



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Foreword

This monograph describes a practical, low-cost needs assessment process used by a community college in cooperation with the public school system.

The assessment was initiated by college administrators who needed information to plan appropriate programs and services for the residents living in a newly created service area.

The material is organized in three major areas: Background of the Problem, Needs Assessment Process, and Conclusions.

The setting describes the general environmental factors surrounding the needs assessment study, including demographic considerations, the need for information, and preliminary plans for implementing the needs assessment project.

The Needs Assessment Process includes a step by step review of the procedure, the rationale, and significant observations or suggestions.

The Conclusions reflect on the outcomes and the significance of the needs assessment process.

Introduction

The community college is possibly the most rapidly growing and dynamic area of higher education in the United States today. Its scope continues to expand as the trend toward "lifelong learning" creates what could be termed the new majority in education—the adult learner. This trend is often attributed to the tremendous birth rate following World War II. Today, community college enrollments tend to dissipate for the traditional college-going age, then increase for older age groups—a time in life when people are commonly drawn back to higher education.[1] And this older clientele is a more diverse group of students than any in the previous history of higher education.[2]

Clearly, the community college is experiencing increasing pressure from a complex and changing society. This pressure(s) challenges the ingenuity of legislators and the fiscal ability of taxpayers to provide the required plant and personnel and program.[3] However, recent developments have necessitated the tightening of budgets at the state and local levels, thus affecting funding for postsecondary education. California's decision to limit and/or decrease the property tax base is certain to have long range effects on community colleges; a mood is building which will create real problems for the two-year institution.

The impact of this dilemma was felt in Broward County, Florida, where a community college planning to increase its services began to deal directly with the realities of limited resources and the demands of a growing, diverse community.

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[1]Steven J. Carroll and Peter A. Morrison, **Influences on the Growth and Decline of Higher Education** (Santa Monica, Cal.: The Rand Corporation, 1976), p. 13.
[2]Dyckman W. Vermilye, ed., **Lifelong Learners: A New Clientele for Higher Education** (San Francisco, Cal.: Jossey-Bass, 1974), p. 88.
[3]Johnson R. Lamar, **Islands of Innovation Expanding** (Beverly Hills, Cal.: Glencoe Press, 1969) p. 32.

Broward Community College was expanding through the addition of a new campus. The decision to expand recognized the growth potential of the county in South Florida. The college administration is keenly aware of the "...need for continual re-evaluation and adjustment to serve the educational needs of all facets of the community,"[1] and yet limited or decreasing resources are of concern.

Planning any new community college campus is a complex process requiring familiarity with the educational needs of the potential clients. "It is becoming a fact of life that information about the characteristics, attitudes, and opinions of a population is essential to any agency or corporation who desires to serve, persuade, or sell to that population."[2]

Knoell suggests that "the communities which the community colleges serve differ widely with respect to the present and potential student clienteles, availability of other opportunities for postsecondary education, and feelings about what their colleges ought to be and do."[3]

The importance of knowing the special characteristics of adult residents for planning purposes in postsecondary education is of local and national concern. A recent report presented to the President of the United States from the National Advisory Council on Extension and Continuing Education stresses the necessity of careful planning for postsecondary clientele:

> Postsecondary budgets and programs are being curtailed out of economic necessity. With the advent of part-time students as the new major clientele for post-secondary institutions, new sources of income and new educational opportunities are being offered. To plan and manage effectively for this clientele—to determine priorities and to allocate scarce resources—postsecondary education must understand more than they now do, the special characteristics of this clientele.[4]

Considering the limitations of the existing data base and population increases, new and more meaningful data must be

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[1]Broward Community College, **Broward Community College Catalog 1976-1977.** (Ft. Lauderdale, Fla.: Broward Community College Printing Office, 1976), pg. 1.

[2]Polly, Carithers, **How to Conduct Low Cost Surveys: A Profile of School Survey and Polling Procedures** Arlington, Va.: National School Public Relations Association, 1973), p. 5.

[3]Dorothy M. Knoell, "Challenging the Model and the Myth," **Community and Junior College Journal** 47 (November 1976) p. 22.

[4]National Advisory Council on Extension and Continuing Education, **A Decade of Service and Continuing Education** (Washington, D.C.: National Advisory Council on Extension and Continuing Education, March, 1976), p. 6.

collected to assist in planning the most appropriate and effective programs and services for the community college campus.

Decision making relative to determining which programs and services to provide demands information beyond the scope of the usual available data, such as United States Census Bureau reports. Yet, the professional educator with decision making responsibility should seek the best available data on which to base decisions.[1]

Because most data banks are deficient, a direct assessment of the service area population most often is necessary to supply adequate information to assist college officials in the planning process. Educational leaders such as Keim,[2] Harlacher,[3] and Yarrington[4] strongly support the position that community assessment is of the utmost importance in developing a viable community college.

This study focused on one approach to the needs assessment a process utilized by Broward Community College.

Part I. Background of the Problem

Authorized by the Florida State Legislature in 1959, Broward Community College began its first session with 701 students in the fall of 1960. Beginning with a limited university parallel program, the College is now a comprehensive multicampus institution. During the 1976-77 academic year, student enrollments exceeded 43,000.

Expansion of service is the direct result of significant population growth associated with the area. Florida is one of the fastest growing states in the nation and Broward County is situated in one of the rapid growth areas of the State.[5] The population in 1950 was slightly under 84,000. In 1960 it had climbed to 333,946 and the 1970 census counted 620,100 residents.

Projecting this growth trend, a ten-year plan for development

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[1]Thomas F. Ryan and Josue' Cruz, **Assessment: Humanizing Decision Making** (Washington, D.C.: American Association of Elementary-Kindergarten-Nursery Educators, 1974), p. 52.

[2]William A. Keim, **A Manual for Establishing a Community College Community Services Program**, Virginia Polytechnic Institute and State University in cooperation with the University of Virginia (n.p. spring 1975), p. 55.

[3]Ervin L. Harlacher, "What it Means to be Community-Based," paper presented to 25th Anniversary Convention, Florida Association of Community Colleges, Tampa, Fla., Nov. 1974 (Mimeographed.)

[4]Roger Yarrington, "Assessing the Community Base," **Community and Junior College Journal** 46 Nov. 19).

[5]Broward Community College, Office of Development and Federal Programs, **Broward Community Coll. 9-1 Ten Year Plan for Development**, (Ft. Lauderdale, Fla.: Broward Community College Printing Office, 1976), p. II-1.

was accepted by the Board of Trustees of the College on January 29, 1970. This plan envisioned three campuses, North, Central and south, to be located in high population density areas of Broward County.

With the establishment of the Central and North campuses, plans called for investigating the needs of adults to be served by the new campus situated in the southernmost portion of the county.

The service area of the South Campus is comprised primarily of six cities, totalling over 260,000 residents. Specific information relating to the educational needs of these residents was to be collected based on the following criteria:

1. The finding of the assessment must be reported no later than September, 1977.
2. The approach to the assessment must be practical and low cost.

Because of time and cost limitations, it was necessary to seek help. It was decided that the best assistance would probably come from another agency providing similar programs and services.

Operating under the Broward County Public School System, and within the South Campus service area are five adult centers, two community schools, and one vocational center. Theoretically, this segment of the public school system serves the same clientele as the community college. It would follow that information resulting from a needs assessment study would be mutually beneficial for the College and the public school system.

Contact with public school officials brought immediate results. The Coordinator of Adult and Community Schools for Broward County Public Schools scheduled a preliminary meeting to discuss the details of the community college's proposed needs assessment study.

The meeting provided an opportunity for representatives from Broward Community College and the Broward County Public Schools to examine various aspects of the study, including: opportunities for cooperation, needed resources, objectives, approaches for data collection, research design, and expected outcomes.

Although resources were limited, the group decided that the "project" would provide valuable information and should be pursued. Realistic commitments between Broward County's

community college, community schools, adult and vocational centers, and a recreation department were confirmed and the cooperative needs assessment was launched.

The problem was how to determine the educationally related needs of a population to be served by a new community college campus in an efficient and effective manner. It was agreed that a needs assessment process unique to Broward County, Broward Community College, and the Broward County Public School System should be developed and tested.

Limited access to resources required that the needs assessment incorporate procedures that would encourage the cooperation and support of at least one related agency, and utilize assessment methods and materials that were efficient, practical, and low cost.

In order to assist in planning appropriate programs and service for the new community college campus, the data produced from the process required the following information about adults living in the service area:

1. Personal background
2. Current occupational and educational status
3. Educational program interests and goals
4. Preferred conditions for learning
5. Perceived barriers to programs and services

Part II: The Needs Assessment Process - Introduction

A major purpose of needs assessment is to gather information about a specific target population to facilitate the planning of programs and services appropriate to the clientele. The process should encourage cooperation between related educational agencies; it should also reflect methods and materials that are practical and low cost.

The following is a step-by-step process for assessing needs. The process is, with few revisions, the one utilized in assessing needs at Broward Community College (B.C.C.).

STEP I: ASSESS RESOURCES

Purpose: Resources should be assessed in order to determine funding, support services, and manpower available to carry out the project.

Rationale: Becoming familiar with the available resources can provide direction for further project development. It is essential to identify the type and amount of resources that will be available to a project in order to reasonably insure its completion; where sufficient resources are not available to the project and cannot reasonably be obtained, it is better to cancel the project than continue when failure is inevitable. Available resources can include manpower for project staff, office supplies, printing and duplicating, postage, computer time, a place to meet and exchange ideas, and actual dollars.

Methods: An accurate picture of the funding and college support services was known; a staff and program development (S.P.D.) proposal to conduct the study of the new south campus service area had been submitted by the director of institutional research at the college. The S.P.D. project was approved although funds were scarce.

Of necessity, the funds requested for salary (project director and clerical support) and related supplies in the original proposal were decreased. The remaining support available was from "in-kind" contributions of the college which consisted of printing and duplicating services, use of office machines and telephones, and data systems. The director of institutional research was to monitor the project director and provide technical (research) assistance when appropriate.

The need for interested volunteer support staff to help conduct the needs assessment was obvious, if low cost was to be achieved.

Based on interactions with Broward college personnel, a list of about 15 potential candidates (primarily employees in a secretarial and quasi-administrative level) was developed. Referrals for additional project staff were to be requested from this "best bet" group should other responsibilities impede participation of those already identified.

It is important when touching base with support system personnel (already designated for the project via S.P.D. proposal) and seeking volunteer staff to *confirm* as opposed to estimating the extent of participation. Methods may be formal (e.g., recorded meeting and memoranda) or informal (e.g., telephone) depending on what seems appropriate. In the B.C.C. needs assessment, selected college employees were contacted by telephone (informal)

to get their initial reaction, and then by a memo (formal) with a "confirmation form" to be completed by their supervisor. In this way, worker and supervisor supplied a verbal and written confirmation of participation. Preliminary contacts should include an overview of the project (i.e., goals, general procedures and time line), so that each person has the opportunity to make a realistic decision to provide assistance and to understand the scope and significance of their contributions.

Comment: At this early stage, it is a good idea to obtain realistic commitments for project support from sources who can and will provide assistance. An accurate picture of available resources will help lend direction to determining the procedures that should be incorporated in the process to help achieve desirable results, as well as to determine what currently unavailable resources will be needed.

Be careful not to overwhelm participants or "helpers" with too much information at first. After the initial contact, inform them that you will be in touch concerning specific duties that will be required for the project. In the meantime, you can begin to research and refine these processes/procedures so that duties can be sharply defined.

The "casual" approach of establishing participation for resource persons through informal initial contact and formal follow-up appears to be reassuring and non-threatening; it provides specific responsibilities and guidelines so that participants feel comfortable with the extent of their commitment after allowing them time to consider their actual or tentative agreement to help.

Note: The decision to be involved as project director is attributed to personal related experiences and a professional leave granted by the college to pursue full-time graduate work.

The project provided a unique opportunity to contribute in a research area of great significance considering the increasing need for services, crunch on funds for post-secondary education, and emphasis on accountability.

Community needs are constantly changing and must be identified and evaluated so that agencies can respond in the most efficient, productive way for community residents.

STEP II: REVIEW OTHER ASSESSMENT PROJECTS

Purpose: Now that manpower, support services, and financial contributions have been reasonably identified, needs assessment studies that have been conducted using similar resources should be researched to help further develop the project.

Rationale: In an effort to save time and avoid duplication of effort, it is essential to carefully examine prior assessment studies methods and techniques. This procedure acquaints the project director with other needs assessment research. Appropriate areas can then be incorporated into the development of the project with a reasonable degree of confidence and understanding.

Method: It is advisable to thoroughly research needs assessment procedures or techniques, and needs assessment studies conducted within the general area of education or human services. This can be done through a traditional library search approach but should include studies, approaches, and materials which have occurred within both local and state areas. Studies can provide valuable demographic, social, economic, and political information, especially if they were conducted in a similar environment addressing a variety of similar issues. Useful information is located in university libraries with access to the Educational Resource Information Centers (E.R.I.C.) and through periodicals and journals identified through the Education Index.

Other sources are available through Health and Rehabilitative Services, the Urban League, State Centers for Community Education, the County Office of Research, and the State Department of Commerce.

While much valuable information was gained from the search, it soon was apparent that a sufficient model for conducting a practical, usable low cost needs assessment was not available; one would have to be developed to fit the situation from the information gained in the review. Sufficient information was available about the general steps and procedures for conducting a needs assessment.

The steps of the process were consistent:

1. Determine resources, objectives
2. Develop methods and materials
3. Organize and conduct the survey
4. Compile, interpret, and share information

5. Establish priorities
6. Implement programs and services
7. Re-assess needs

Comment: Considering the relative importance of needs assessment, it was surprising to discover the lack of studies vaguely resembling the community college project. According to a report by the National Advisory Council on Extension and Continuing Education, problems facing many state agencies include: "Increasing stable or decreasing enrollments of traditional college-level people, increased competition for students, new concern over students' access and choice, a broader range of post-secondary educational institutions than ever, questions about innovation and more relevant instruction, changing student attitudes, increased interest in life-long learning, institutional independence and accountability, more effective and efficient management and utilization of resources, and questions of who shall pay and how much."[1]

Most of the studies examined were conducted with extensive human and financial resources heavily subsidized by grant funds from the USOE, Department of HEW. Many procedures used in these studies were rather elaborate and not appropriate for this project. However, some of the materials such as survey forms and interview techniques could be used.

At this point, the framework of the assessment project began to emerge. The parts of the process that needed to be developed could be identified, as could those that were adaptable from other research.

A review of other needs assessment projects and available resources helped determine the probability of success. Now a suitable survey method could be determined, and the necessary resources, support materials, and research design identified and refined. The model was beginning to take shape.

STEP III: ESTABLISH THE SURVEY TEAM

Purpose: The purpose of this step is to elicit sufficient help to ably conduct the survey. Manpower, in the form of a "team" of 20-30 members, was needed to interview adults. Ideally, this team should

[1]National Advisory Council on Extension and Continuing Education **A Decade of Service and Continuing Education** (Washington, D.C.: National Advisory Council on Extension and Continuing Education, March, 1976), pg. 6.

be comprised of capable and interested adults. Typically, this group needs training.

Rationale: Interviewing requires people who are skilled in dealing with the public. A combined effort using community college and public school employees appeared to be most cost efficient and practical. The team should be trained to provide continuity. Since cost was a factor, telephone interviews were utilized.

Method: Once preliminary action has been taken, follow-up communication can be initiated. Employees and their supervisors at the community college were contacted by telephone or in person to confirm the extent of their commitment in relation to the specific duties of survey team members. (See Step I.)

Since a reliable "pool" of volunteers was needed, other employees were identified by the initial group to help complete the team. When the initial source is insufficient additional sources can be contacted. In this case, the public schools were contacted with the expectation that they should be interested in the data and their personnel should be more than capable of carrying out the telephone interview.

The director of adult and community schools was contacted by telephone, followed by a personal visit to determine the amount of interest and possible resources to be contributed by the public schools. At this meeting, the survey team concept and the objectives of the needs assessment were discussed.

The coordinator confirmed the value of a needs assessment and sent a letter to all community and adult centers announcing a meeting to be held with all those interested.

Comment: Participation in most projects is greeted with enthusiasm when responsibilities appear reasonable (minimal) and are clearly defined. It is also helpful when outcomes or results are desirable to all participating agencies; this raises motivation and helps insure that each agency will fulfill its obligations.

STEP IV: MEETING WITH KEY GROUPS

Purpose: Before moving ahead on a project, it is a good idea to get the blessing and support of officials involved; once that is accomplished, the survey team can be trained. It is necessary to acquaint college and public school administrators, supervisors, and staff with the various aspects of the needs assessment process.

Rationale: The meetings provided an opportunity for these groups to get better acquainted, exchange ideas, make suggestions, and ask questions.

The communication and interaction can afford those involved a chance to contribute to the process. It was obvious that the encouragement of a working partnership was dependent on the working relationships and open communications created at these gatherings.

Method:

A. An **orientation meeting** was scheduled at a school board designated site by the administrators/coordinators of the community/adult schools, principals and the project coordinator, research consultant and a college administrator in charge of the new campus.

The group adopted the procedures suggested and public school personnel pledged to supply appropriate employees for the survey team—a key to success.

An *orientation packet* was distributed to acquaint the group with basic information about the study. This information was designed to encourage input by maximizing the level of comprehension, and minimizing time and effort for meeting participants. The orientation packet included: a brief introduction, draft of the survey instrument, methodology and procedures, and proposed dates for conducting the survey.

These materials were stamped "DRAFT" to clarify that the contents were merely suggested and that input from public school personnel was welcome and would be considered.

B. **A survey team member field test meeting** was scheduled to acquaint participants with the content and use of the survey instrument and support materials. This six member group was encouraged to ask questions, and make comments and suggestions as materials and procedures were reviewed.

A field test was conducted over a four-day period with each member completing five interviews. Team members assembled afterward at a follow-up meeting and shared experiences about the experimental assessment procedures and materials and the reactions of respondents. All meetings with the Survey Team were

taped so that comments and suggestions could be reviewed when necessary.

Distributed at this meeting was the primary resource tool for interviewers—*the survey team member packet.*[1] This looseleaf notebook contained comprehensive information about the needs assessment including: 1. reasons for the project; 2. how to conduct the survey; a) techniques and b) coding survey forms; 3. survey completion criteria; a) categories, b) random phone number bank; c) response sheet for completing category quotas; d) coding sheets; and e) dates for completing the survey; 4. resource and referral information (upcoming adult education and community services schedules and registration information); and 5. an evaluation sheet to determine the convenience and effectiveness of the materials in the packet.

C. **A survey team member orientation meeting** was held for the 25 member team. The contents of the revised survey team member packet were reviewed. Emphasis was placed on the importance of accurate recording of responses and data processing codes, correct use of the random phone number bank, practicing effective communication techniques, and meeting the quota sampling criteria.

Comments: Meetings were an effective source of information exchange. Other supportive communication techniques proved crucial in maintaining control and direction of this complex task.

Refreshments were served in anticipation of lengthy orientation/training sessions which lasted between two and three hours. This appeared to be genuinely appreciated by participants and probably increased the attention span.

The appendix contains a list of these techniques and when they were used. *Note:* the *timing* involved in communicating is as critical as the method.

STEP V: RESEARCH DESIGN

As in most studies or projects, sound statistical design is crucial if the data collected are to be meaningful (valid) and the design of the project usable (reliable). In this case, several factors affected research design, 1) time and resource limitations, 2) data were to be

[1] A complete copy of contents of the survey team member packet is available at the Center for Community Education, AACJC.

collected from adults living in each city comprising the service area, and 3) practicality—easily administered and processed materials were necessary.

The following are the major research methods and techniques used to implement the needs assessment. (They are not necessarily a needs assessment step since they could be done before or after most of the previous steps. In this case, the methods and techniques were designed as the project progressed.)

A. **Population Stratification**

Purpose: The purpose of stratification is to assure that the sample drawn will approximate the age, sexual, racial and geographical make-up of the actual population examined.

Rationale: Unless the researcher predetermines the actual make-up of the community, it is quite possible to under-represent or totally miss key strata of the community. Stratification helps avoid this problem.

No data base was available and no other information had been systematically collected that was appropriate for project use.

Method: The specific area to be studied is made up of about forty census tracts located within the standard metropolitan statistical area (SMSA) of Ft. Lauderdale-Hollywood, Florida.

The population to be examined consisted of 176,894 adults 18 years of age and older living in the service area comprised of six cities. The population was stratified according to age, sex, race, and geographical area in order to make the sample representative.

Information on the stratification categories (age, sex, race, geographical area) is easily obtained from U.S. Census Bureau Reports which are available nationwide in most libraries or through local governmental agencies.

A county map depicting the city boundaries of Broward County was obtained from the Office of the Supervisor of Elections. Careful examination of the census tract and county maps made it possible to determine which census tracts comprised each city of the service area. (If tracts extended across city boundaries, it was necessary to estimate the population within each segment of the overlapping or "split" tract.)

Since information concerning age, sex, and race is reported by census tracts, these characteristics can easily be compiled and

recorded by city. To avoid ommitting any tracts, the total population for each city was compared to the total population of the tracts representing these areas.

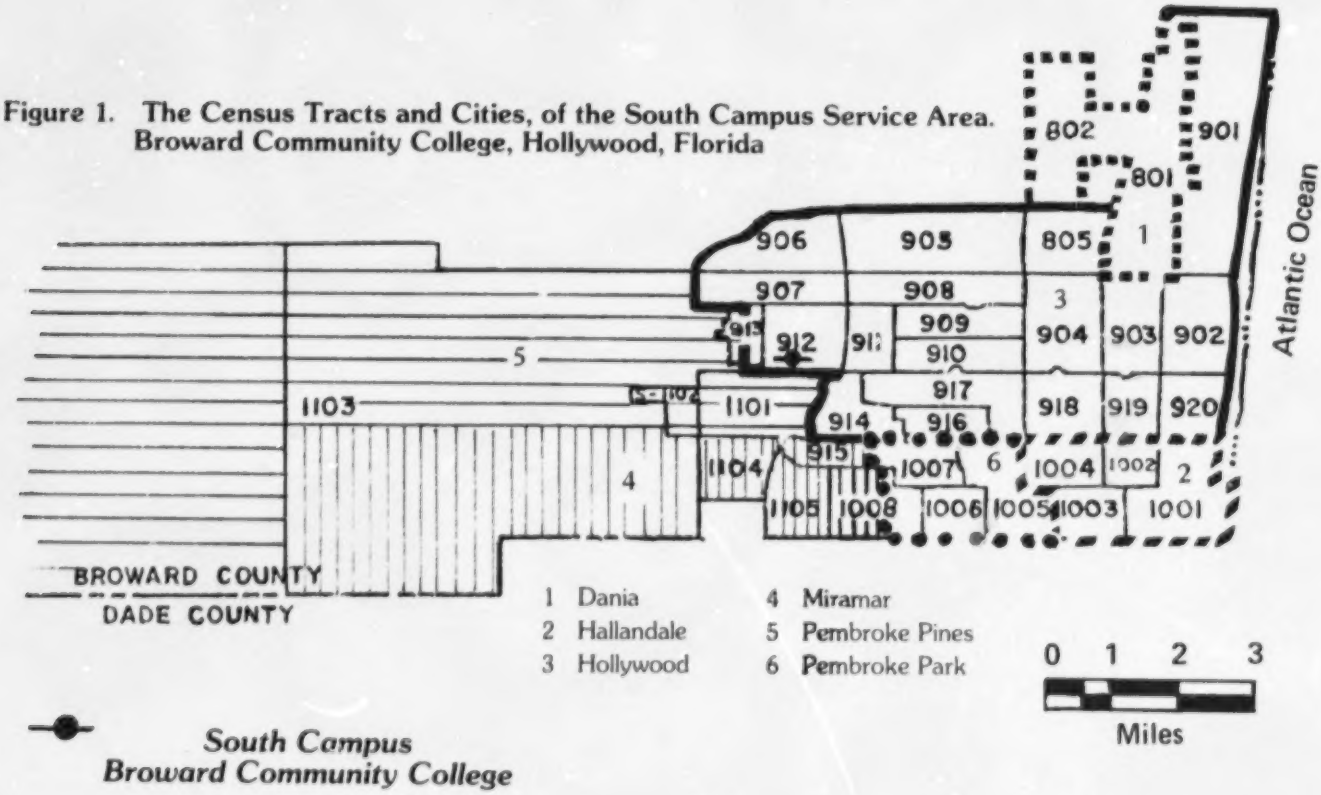
The data in Table 1 illustrate the composition of the population of one of the cities in the service area. It was based on the county and census tract maps and U.S. Census Bureau reports, presented in Figures 1, 2, and 3.

Table 1

POPULATION OF THE CITY OF DANIA BY CENSUS TRACT, AGE SEX, AND RACE

Tract	Total Population	Population by Age, Sex, and Race				
		Total Pop. 18 & over	White Males 18 & over	White Females 18 & over	Black Males 18 & over	Black Females 18 & over
801	4,667	3,780	[illegible]	1,985	-	-
802	2,150	1,563	748	815	-	-
805	2,462	1,353	-	-	602	751
Tot.	9,289	6,696	2,543	2,800	602	751

Figure 1. The Census Tracts and Cities, of the South Campus Service Area.
Broward Community College, Hollywood, Florida



General Characteristics of the Population: 1970

Census Tracts	Balance of Broward County – Cor.									
	Tract 0801	Tract 0802	Tract 0803	Tract 0804	Tract 0805	Tract 0901	Tract 0905	Tract 0906	Tract 0907	Tract 0915
RACE										
All persons	4 677	2 180	1 301	6 094	3 902	9	161	648	50	4 365
White	4 656	2 024	1 294	6 088	79	9	161	550	50	4 350
Negro	6	124	4	3	3 803	–	–	–	–	3
Percent Negro	0.1	5.8	0.3	–	97.5	–	–	–	–	0.1
AGE BY SEX										
Male, all ages	2 269	1 044	648	2 955	1 817	4	79	317	27	2 117
Under 5 years	113	77	39	207	212	1	1	41	2	166
3 and 4 years	47	32	14	75	81	–	–	18	–	62
5 to 9 years	126	81	37	203	225	1	–	33	8	217
5 years	26	14	5	44	38	–	–	8	2	48
6 years	25	18	6	42	50	–	–	10	3	51
10 to 14 years	140	91	43	255	236	–	3	41	7	213
14 years	35	18	7	55	46	–	–	6	–	47
15 to 19 years	139	82	49	242	169	–	2	24	5	163
15 years	31	17	14	55	34	–	–	8	1	33
16 years	36	17	9	51	31	–	1	6	2	35
17 years	28	15	10	47	39	–	1	6	–	40
18 years	25	15	12	52	41	–	–	–	–	32
19 years	19	18	4	37	24	–	–	4	2	23
20 to 24 years	146	48	46	199	125	–	4	13	–	147
20 years	22	5	11	39	26	–	–	2	–	23
21 years	20	6	8	35	24	–	2	–	–	20
25 to 34 years	235	106	87	334	216	1	6	43	2	276
35 to 44 years	237	129	67	332	210	1	4	49	2	233
45 to 54 years	299	124	95	392	172	–	17	22	3	240
55 to 59 years	170	67	38	185	73	–	9	13	1	86
60 to 64 years	176	62	50	161	58	–	11	11	2	98
65 to 74 years	333	137	68	327	83	–	16	17	–	179
75 years and over	155	42	30	118	38	–	8	10	–	99
Female, all ages	2 408	1 136	653	3 139	2 085	5	82	339	33	2 248
Under 5 years	92	79	38	233	228	2	1	35	3	174
3 and 4 years	30	22	17	98	93	–	1	18	–	57
5 to 9 years	109	87	50	216	225	1	3	35	1	201
5 years	28	14	5	50	45	–	1	4	1	37
6 years	13	15	2	38	47	–	–	9	–	42
10 to 14 years	141	74	41	255	204	–	1	35	4	199
14 years	25	15	10	50	50	–	–	5	1	44
15 to 19 years	139	82	47	232	239	–	3	26	1	152
15 years	23	11	10	51	58	–	–	4	–	30
16 years	32	18	12	36	48	–	2	4	–	26
17 years	26	20	6	56	43	–	1	8	–	29
18 years	29	13	13	45	40	–	–	4	1	34
19 years	29	20	6	44	50	–	–	6	–	33
20 to 24 years	178	64	39	223	202	–	3	36	2	178
20 years	33	12	5	46	54	–	1	5	1	30
21 years	28	10	3	31	31	–	1	5	–	36
25 to 34 years	221	130	84	357	222	2	4	48	3	284
35 to 44 years	228	119	71	360	247	–	7	41	2	252
45 to 54 years	343	148	103	484	217	–	14	35	4	252
55 to 59 years	186	66	48	212	90	–	13	11	2	88
60 to 64 years	205	88	52	198	63	–	17	8	–	132
65 to 74 years	300	127	73	312	82	–	16	17	1	213
75 years and over	186	40	27	117	66	–	–	12	–	113

Source: U.S. Department of Commerce, Bureau of the Census, (Washington, D.C.; Government Printing Office, 1970), p. 9

Figure 2: 1970 Census Bureau Report of the General Characteristics of the Population, Ft. Lauderdale-Hollywood, Florida

General and Social Characteristics of the Negro Population: 1970

Census Tracts With 400 or More Negro Population	Balance of Broward County—Con				
	Tract 0507	Tract 0508	Tract 0805	Tract 1004	Tract 1007
AGE BY SEX					
Male, all ages	488	1 311	1 769	2 781	2 117
Under 5 years	54	226	215	304	204
3 and 4 years	31	90	83	167	72
5 to 9 years	46	226	190	307	338
5 years	10	50	20	62	45
6 years	4	36	33	56	84
10 to 14 years	80	240	279	384	290
14 years	3	22	60	82	60
15 to 19 years	44	133	163	310	292
15 years	9	26	46	70	76
16 years	24	38	24	62	67
17 years	–	25	27	65	75
18 years	11	19	44	39	53
19 years	–	25	22	74	21
20 to 24 years	30	105	105	175	127
20 years	–	26	9	46	35
21 years	13	13	26	10	18
25 to 34 years	12	197	249	379	205
35 to 44 years	14	217	170	276	244
45 to 54 years	38	81	168	195	175
55 to 59 years	41	40	52	95	88
60 to 64 years	–	30	68	111	61
65 to 74 years	41	5	96	116	67
75 years and over	–	11	14	49	26
Female, all ages	368	1 376	2 043	2 933	2 282
Under 5 years	42	204	203	265	225
3 and 4 years	8	107	68	110	104
5 to 9 years	60	257	222	316	256
5 years	–	26	62	54	43
6 years	–	58	25	92	37
10 to 14 years	40	206	243	405	400
14 years	14	34	71	101	85
15 to 19 years	19	177	227	308	305
15 years	19	31	50	70	74
16 years	–	11	57	78	50
17 years	–	57	44	65	69
18 years	–	36	53	38	59
19 years	–	42	23	57	53
20 to 24 years	22	111	195	229	127
20 years	7	3	66	49	42
21 years	15	35	19	18	14
25 to 34 years	10	273	233	360	262
35 to 44 years	40	184	236	395	280
45 to 54 years	79	57	176	251	226
55 to 59 years	19	34	103	99	68
60 to 64 years	–	34	90	115	39
65 to 74 years	37	11	75	149	66
75 years and over	–	28	39	41	28

Source: U.S. Department of Commerce, Bureau of the Census, (Washington, D.C.; Government Printing Office, 1970), p. 47

Figure 3: 1970 U.S. Census Bureau Report of the General and Social Characteristics of the Negro Population, Ft. Lauderdale - Hollywood, Florida

This information makes it possible to determine the racial make-up of the total area and to draw random names from tracts where the likelihood of selecting a person of race or location appropriate to the needs of the study. For example, in tract 805 the researcher would be likely to draw a respondent who is black; in tract 801 or 802 the person would probably be white.

Comment: It would have been nearly impossible to collect the data by city if the census tracts representing each specific area were not available. This may not present a significant problem when more easily defined areas are examined. In most cases, totaling all the census tracts representing the entire area will suffice.

All adults 18 years and older were totaled by census tract. Each tape from the adding machine was marked with the tract number and then grouped by city. This provided a permanent record of the research which can be examined and documented in the future.

B. Selection of the Sample

Purpose: The purpose of this action is to identify a sufficient number of people to question to get a good idea of how the community would react to the same questions.

Rationale: Quota sampling involves methods to insure a sample representative of the population to be studied. In this procedure, a list is prepared of the different types of individuals desired for the sample. This may be based on census data or other information about the population.[1] According to Kerlinger, sex, race, region, and other strata areas are used to select sample members that are representative or "typical" of the population.[2]

In quota sampling, the interviewer is given specific categories of the desired types of individuals to interview, and instructed to obtain a "quota," or an exact number of each type or category. Meeting the criteria of specific numbers of each category is the primary difference between stratified random sampling and quota sampling.

The sample size is based on the maximum simple random sample needed to produce sampling estimates within five percent tolerated

[1]George J. Warheit, Roger A. Bell, and John J. Schwab, "Planning for Change: Needs Assessment Approaches," University of Florida, Gainesville, Fla., 1976, p. ii, (Mimeographed).
[2]Fred N. Kerlinger, **Foundations of Behavioral Research** (New York: Holt, Rhinehart and Winston, 1973), pg. 129.

error, and a 95 percent level of confidence[1] and is applicable to any defined population.[2] Generally, the larger the sample size, the more reliable the results. However, if funds are limited, a reasonably good inference can be made from samples of two or three hundred households.[3]

Method: A sample of 384 adults was selected from the population using a quota sampling technique. The following procedures were utilized to determine the number of samples that represented the population in each category according to age, sex, and race.

Steps to determine quota categories of sample by age, sex and race

1. Determine by race and sex the adult population (18 and over) in each city (Refer to Table 1, and Figures 1-3).
2. Calculate the percentage of the adult population that represent each required category, e.g., white male, white female, (Refer to Table 1).
3. Determine what percentage each city represents of the total service area adult population (Refer to Table 3).
4. Multiply this percentage by the sample representing the population (385).
5. Multiply this figure by the percentage of male, female, white, black, or Spanish origin adults.

This will yield the total sample of adults, by sex, race, and city, of the entire service area to be studied. (Tables 4 and 5 present this information by frequency and percentage.)

To cite a specific example of this procedure, the sample to be surveyed in the City of Dania is calculated as follows, based on data from Tables 2 & 3.

1. The City of Dania represents five percent of the population, 18 years of age and older, of the total service area population.
2. The total sample representing the population is 384. If this is multiplied by five percent, the number of respondents

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[1]Carter V. Good, **Essentials of Educational Research** (New York: Appleton-Century-Crofts, 1966) pg. 32.

[2]Robert V. Krejhe and Daryle W. Morgan, "Determining Sample Size for Research Activities," **Educational and Psychological Measurement** 30 (June 1970): 607.

[3]League of California Cities, **Assessing Human Needs,** (Sacramento, Cal.: League of California Cities, August, 1975), p. 1.

necessary to represent the population of Dania is 19.

3. The percent that each category (white male/female, black male/female, Spanish male/female) represents the Dania population is multiplied by 19.

For example, in the white male category, 30 percent times 19 = 7.22 or 7 white males to satisfy the quota sampling for the City of Dania.

Tables 4 and 5 represent the quotas by frequency and percentage necessary to complete each category according to city, race, age, and sex for the total service area.

Table 2

Percentage of Population By Age, Sex, and Race for the City of Dania

(5 percent of total service area population)

Age, Sex, and Race	Population	Percentage of Population 18 and Over
White Males 18 and over	2,543	38
White Females 18 and over	2,800	42
Black Males 18 and over	602	9
Black Females 18 and over	751	11
Total Population/Percentage 18 and over	6,696	100

Table 3

1970 Population, Population By Census Tract
1976 Population Projections By City
And Percentage of Adult Population
18 and Over

Population City	1970 Census Tot Pop	Tot Pop by Census tract	1970 Census 18 & over	1970 % Pop 18 & over	1976 Pro-jected Pop	1976 Projected Pop 18 & over	1976% of Pop 18 & over
DANIA	9,013	9,289	6,696	5	10,750	8,127	5
HALLANDALE	23,748	22,088	17,676	13	34,675	26,214	15
HOLLYWOOD	106,873	105,691	77,229	58	124,900	94,430	53
MIRAMAR	23,997	26,259	17,508	13	30,900	23,362	13
PEMBROKE PINES	15,496	16,088	11,156	8	28,500	21,548	12
PEMBROKE PARK	2,949	4,436	3,934	3	4,250	3,213	2
SERVICE AREA TOTALS:	182,177	183,851	134,199	100%	233,975	176,894	100%

Source: Research Department, Broward County Planning Council, Ft. Lauderdale, Florida, 1976.

Table 4

Quota Category Frequencies
By City, Race, and Sex

City	White Male	White Female	Black Male	Black Female	Spanish Male	Spanish Female	Total
Dania	7	8	2	2	-	-	19
Hallandale	22	25	5	6	-	-	58
Hollywood	89	105	2	4	2	2	204
Miramar	23	25	-	-	1	1	50
Pembroke Pines	21	23	1	1	-	-	46
Pembroke Park	4	4	-	-	-	-	8
Subtotal	166	190	10	13	3	3	385

Table 5

Quota Category Percentages
By City, Race, and Sex

City	White Male	White Female	Black Male	Black Female	Spanish Male	Spanish Female	Total
Dania	37.0	42.0	10.5	10.5	-	-	100.00
Hallandale	38.0	43.1	8.6	10.3	-	-	100.00
Hollywood	43.5	51.5	1.0	2.0	1.0	1.0	100.00
Miramar	46.0	50.0	-	-	2.0	2.0	100.00
Pembroke Pines	45.6	50.0	2.2	2.2	-	-	100.00
Pembroke Park	50.0	50.0	-	-	-	-	100.00
Percentage of Total Population	43.0	49.0	2.6	3.4	1.0	1.0	100

This total sample 384 was known when the survey team was being formed which assisted in determining a realistic size for the team and the amount of interviews to be completed by each member.

C. Collection of Data

Purpose: Once the previous preparatory steps are completed, the real purpose of pre-planning is carried out through a specific methodology.

Rationale: The rationale is obvious--the whole project has as its focus the collection of data.

Method: This telephone method using a questionnaire survey form was based on the criteria established for the project; the approach must incorporate methods and materials that are practical, low cost, and encourage cooperation.

The following is a summary of the nature, strengths, and weaknesses of the three major techniques generally associated with *collecting survey data.* These techniques are the door-to-door interview, the mail-out survey, and the telephone interview, and are summarized according to information from the League of California Cities,[1] U.S. Department of HEW,[2] and Warheit, et al.[3]

The *door-to-door survey technique* involves a personal encounter between an interviewer and a respondent. Advantages of this technique are:

1. more insight into problems and needs by asking questions in person
2. it yields the highest percentage of responses per individual surveyed,
3. more comprehensive coverage of the population than telephone interviews or mailed questionnaires.

Disadvantages of this technique are:

1. costs are the highest of all survey methods in terms of

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[1] League of California Cities, pp. 61-67.
[2] U.S. Dept. of Health, Education and Welfare, **A Guide to Needs Assessment in Community Education** (Washington, D.C., Government Printing Office, 1976), pg. 7.
[3] Warheit et al., pp. 115-121.

financing and agency effort (staff salaries, travel, keypunching, computer processing, and questionnaires)
2. more time is required for careful selection, extensive training, and supervision of interviews
3. a certain element of danger can exist while working in a face-to-face situation (especially in areas with high crime rates)
4. time consumed in traveling, locating proper addresses, and possible return trips to satisfy sampling criteria.

The *mail-out survey or questionnaire* involves the use of an instrument which is mailed to a sample of persons living in a community. The advantages of this method are:

1. costs are reduced due to minimal staff, training, and supervision required
2. its practicality in rural areas
3. it encourages more candid and honest responses with the absence of an interviewer.

Disadvantages include:

1. a usually poor response rate (less than 25 percent)
2. responses by a self-selected, unrepresentative group
3. interpretation and understanding of questions is not always uniform and complete
4. ineffective for eliciting responses from illiterate people,
5. its impersonal nature fails to elicit a detailed or more open-minded response.

The *telephone interview* technique involves the development of a questionnaire or survey form and the selection of representative numbers to be dialed by the interviewer.

The telephone survey has enjoyed increased popularity in recent needs assessment research. Advantages associated with this technique are:

1. the cost is substantially below that of person-to-person interviewing (many more persons can be contacted for the same amount of resources expended)
2. it is less threatening than a person-to-person interview
3. it provides a chance for direct contact and more detailed insight into the nature of citizens' problems and needs
4. recontacting respondents who have been selected, but who were unavailable for interviewing, is relatively simple and

much more economical than in person-to-person interviewing
5. comparative ease of administration
6. its ability to reach a majority of the target population.

Disadvantages inherent in this technique are:

1. the automatic exclusion of a segment of the population with unlisted telephone numbers, or not having access to a telephone;
2. some training of volunteers is necessary;
3. respondents can break off the interview before it is completed;
4. it is not possible for the interviewer to monitor visually the nonverbal behavior of the respondent;
5. a telephone interviewer, who has had no opportunity to legitimate his position through the presentation of visible credentials, will be limited in the kinds of questions he can ask. (This is especially true in communities where large numbers of business firms use the telephone to sell merchandise under the guise of doing a survey.)

Two of the three major approaches to data collection are neither practical nor low cost. The door-to-door interview is too costly in terms of dollars, time, and effort required. The mail-out questionnaire does not afford the opportunity for personal interaction and answering questions about the content of survey material. The cost of paper printing and postage has increased. Envelopes, questionnaires, mailing labels, and postage required (bulk rate and first class), must be at least four times the amount to meet sample size requirements since 25 percent is the average return rate.

To insure 384 returned questionnaires for this study, four times the sample (1,540) would have to be distributed with material costs totalling $410.25. Less than one-third of this amount ($116.25) was necessary to supply materials for the telephone interview technique. Further, English and Kaufman support the position that large communities sampled by mail can be quite expensive.[1]

Considering the nature and purposes of this project, the disadvantages associated with telephoning community residents were outweighed by the positive aspects of the approach.

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[1]Fenwick W. English and Roger A. Kaufman, **Needs Assessment: A Focus for Curriculum Development** (Association for Supervision and Curriculum Development: Washington, D.C., 1975), p. 6.

The collection of data was limited to a sample group selected at random from the 1977 Hollywood Telephone Directory, which included all residents (except those unlisted) in the target population area.

To provide an adequate number of telephone numbers necessary to meet quota sampling requirements, three times the sample, or 1,155 telephone numbers were selected. Beginning with the left hand column of telephone listings, every name and telephone number appearing on the three-inch mark (on a three-inch ruler) was recorded by city.

Guidelines were followed to insure a valid and reliable sampling technique when using random telephone listings. Each interviewer was instructed to exhaust an initial pool of listings (telephone numbers and names) equal to the number of surveys required to be completed before proceeding to the next (additional) listing. These additional telephone listings were supplied based on: 1) the abundance of unanswered or disconnected telephones, and 2) the requirement of completing quota categories.

For supplementary information concerning telephone procedures, request the survey team member packet available at the Center for Community Education, AACJC.

The questionnaire form designed to survey service area adults by telephone focused on the following:

1 personal background information
2. current occupational and educational status
3. educational program interests and goals
4. preferred conditions for learning, and
5. perceived barriers to programs and services.

In addition to the survey questions providing specific information, the design of the instrument considered clarity and readability of content, speed and ease of recording responses, length, number, and sequencing of questions, and direct coding for data processing.

Questions consisted primarily of two types—forced choice and open-ended responses. The open-ended responses were recorded on a "response line" located on the survey form. The responses were coded and recorded at the conclusion of each interview.

Survey forms were printed on pastel yellow paper and

consecutively numbered to maintain control and assist in recordkeeping. A "quota code" box in the upper right-hand corner of each form was instrumental in determining the total number of categories completed, ie., white male/female, black male/female, or Spanish male/female. (Refer to the appendix to examine the questionnaire survey form.)

Comment: As in all research design, it is possible to exclude certain segments of the population, especially those with low income, unless care is taken. Local social service agencies, however, can help resolve the problem. The questionnaire could easily be administered by a volunteer or receptionist while clients are waiting for medical, job placement, counseling, or nutrition services. This shortcoming is recognized by Warheit, et al.[1], who states "...unless specific subpopulations are being researched, systematic bias may be introduced into the responses being received."

The survey form proved to be easy for the interviewer to use. The responses coded directly on the survey form, thus eliminating the need for a second procedure to encode information for data processing. The computer package selected to best display the data was the Statistical Package for the Social Sciences (SPSS). This program can present data in a variety of ways - by frequency distributions and cross tabulations using several variables.

STEP VI: MEETINGS AFTER SURVEY COMPLETION

Purpose: Two major meetings were held after the survey process was completed—one for survey team members, and one for college and public school officials who attended the original orientation meeting. Both were for the purpose of recognizing those whose input had been valuable and to provide follow-up to the participants.

Rationale: Since the successful completion of the project hinged on the performance of survey team members, it would seem appropriate to recognize and reward their significant contributions to the project.

It is also essential to share the results of the project in a formal "follow-up" meeting with those officials who indicated an interest in

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[1]Warheit, et al., p. 120

the project. It is not necessary to restrict invitations to those who actively participated. Spreading the word about a successful project is the most important consideration.

Method: At the midpoint of the telephone survey process, *handwritten invitations* were mailed to all survey team members and selected representatives from the college and public schools. A "recognition coffee" was being held at the community college as an expression of appreciation for the contributions of all survey team members. (It was evident that this was a "morale boost" when survey team members responded to the R.S.V.P. on the invitation.)

The affair was held in the Board Room of the community college. Keenly aware of the unique accomplishments of the cooperative survey team, the president of the college, presented hand-lettered *certificates of appreciation* in recognition of service and personal effort "toward the betterment of education in Broward County." All support materials and newspaper articles and photographs relating to the project were displayed for everyone to peruse.

In preparation for the *follow-up meeting*, a report was developed to reflect the data most requested by needs assessment participants. *The Report of the Cooperative Needs Assessment* was divided into four sections: 1) a brief summary and introduction, 2) tables of compiled date, 3) comments by respondents, and 4) names and addresses of respondents requesting to be placed on community college (community services) and public school (adult education) mailing lists.

At the meeting, the report was distributed, and the significance and value of the data discussed.

The major outcomes explained at the meeting were that:

1. the data generated were useful and valuable
2. the systematic collection of data by a comprehensive service area avoided duplication of effort
3. through a cooperative approach, the interpretation, significance and value of the data were increased.
4. the cost, time and effort to collect data were decreased.

The coordinator for adult and community schools, and others commended the project. Representatives from the college pointed out that the public schools were equally responsible for the positive results of the assessment study.

Based on the successful completion of the needs assessment project, the meeting adjourned with a discussion of plans for *future cooperative endeavors* between the community college and public schools. This was a very significant step in building a cooperative, working relationship in South Florida.

Comment: Aside from production of a unique data base for the community college and public schools, many spin-offs, using a cooperative process, occur that are not particularly measurable but are of equal importance in terms of building positive and productive relationships.

It was obvious that the "recognition coffee" was a most beneficial experience in that team members were brought together in a social situation. Thoughts were shared and a sense of a camaraderie and "job well done" prevailed. Overall, many new and meaningful associations were developed or renewed as a result of the interactions associated with the needs assessment project.

Thus the needs assessment process fills an additional function—bringing people and agencies together in a positive endeavor that has many side benefits.

Part III: Conclusions

The Needs Assessment Process

Three key elements are closely associated with needs assessment: cooperation, practicality, and low cost.

COOPERATION

Eliciting cooperation proved absolutely necessary. First, the resources required were less of a burden when spread over multiple agencies. Second, the personnel contributed by the public school system were ideally suited for interviewing respondents by telephone. They possessed clerical and communication skills in addition to knowledge about their respective programs and services—an ideal combination for the purposes of the assessment.

The cooperative enthusiasm and support by public school representatives in the needs assessment project could be attributed to: (1) the open discussions at the orientation meeting which were an opportunity to ask questions and make suggestions; (2) the orientation packet distributed at this meeting which contained materials that presented a clear picture of the study and maximized understanding of the various components of the project and encouraged input; (3) the mutual need for data relating to educational needs; and (4) the prohibitive cost and amount of the resources if left to a single agency.

PRACTICALITY

Practicality in administration was important, considering the availability of one co-director responsible for organizing and implementing the project. Consequently, methods and materials employed were simple, convenient, portable, and required a minimum of effort.

The development of a single master *mailing list* assured an automatic, comprehensive distribution and reporting of project news and progress.

The *orientation packet* allowed participants to become acquainted with the basics of the project with minimum expenditure of time and effort. All materials or exhibits were clearly stamped "DRAFT" to reinforce the importance of contributions originating from the group, and to encourage an exchange of ideas. The outcome produced was a group product; a modification of proposed materials and suggested procedures. One two-hour meeting was sufficient to begin instigating changes and making decisions concerning the project.

According to responses from the *survey team member evaluation form*, the content of the *survey team members packet* was well organized and convenient to use. The packet served as a comprehensive guide to the interview process and supplied the necessary "tools" to complete the telephone survey task. The contents of the notebook could be reviewed at any time by the survey team member, thus reducing the need for supplementary meetings and telephone calls.

The *survey form* used in interviewing respondents provided questions written in everyday language, and avoided educational jargon; survey team members and respondents alike were "speaking the same language." The use of white space contributed to the clarity and readibility of the survey, making recording and coding responses easier. Coding responses directly on the survey form saved a great deal of time and effort.

The *384 telephone interviews* were completed within a two-week period, averaged about five minutes per telephone call, and were completed by the survey team at nine locations in south Broward County. The telephone procedure proved to be a fast, effective way of collecting information.

Communication between the survey team members and the project co-directors was primarily by telephone since most were full-time employees at the community college and the public schools. This method of maintaining contact between participants was reliable, convenient, and time saving.

LOW COST

The low cost of the study can easily be evaluated by comparing one approach of the needs assessment process to another. If a mailout questionnaire were used, the cost would be three and a half times that of a survey completed using the telephone interview technique. The cost of a door-to-door survey is prohibitive since it is generally considered to be the most costly of all.

The following is a summary of the resources required and the estimated costs necessary for developing and implementing this needs assessment.

Required Resources and Estimate of Cost — 1978

STAFF	COST
One co-director (full time)	None (full-time graduate student on professional leave from the community college)
One co-director (part-time consultant	None (full-time Director of Institutional Research at the community college)
Eight survey team members (community college)	None (full-time employees)
Seventeen survey team members (public schools)	None (full-time employees or PTO members)
One typist (part-time)	$300.00
	SUBTOTAL $300.00
MATERIALS	
Printing of 700 survey questionnaires	$90.00
12 survey team members kits:	
notebooks	None (left over from previous workshop)
duplicating	6.00
dividers	.75
pocket inserts	2.50
12 orientation packets:	
duplicating	4.00
Postage	13.00
Food service:	
Orientation meetings	12.00
Recognition coffee	15.00
Data processing	None (college support services)
Photographs of all meetings	None (college support service)
Tape recordings of all meetings	None (college support service)
	Subtotal $143.25
	Total $443.25

Figure 4. The staff, materials, and costs required for the needs assessment study.

With the exception of the part-time typist, all other available personnel were "donated", as were college support systems (eg., data processing and duplicating).

The estimated cost per survey completed was $1.15. This broke down to $.0026 per person for the adult population of 176,894 living in the new service area.

In addition to the three primary elements (cooperation, practicality, and low cost), other critical factors proved essential to the process.

The random sampling procedure was effective. The age ranges of the respondents living in the service area were similar to those recorded by 1970 U.S. Census Bureau reports, except for the 60 and over age category. (Table 6).

TABLE 6

AGE RANGES OF SURVEY RESPONDENTS AND 1970 U.S. CENSUS BUREAU REPORTS FOR THE SOUTH CAMPUS SERVICE AREA, BROWARD COMMUNITY COLLEGE, HOLLYWOOD, FLORIDA

AGE RANGE	Percentage of Total Population (All ages)	
	1970 Census Data	1977 Needs Assessment Data
20-24	5.6	5.5
25-34	17.1	10.5
35-44	16.9	10.7
45-54	14.8	11.5
55-59	6.5	5.8
60 and over	26.6	36.9

The random phone number bank supplied three times the number of names and telephone numbers necessary to complete quota categories. This amount proved to be adequate, with the 384 surveys completed after placing 1,153 calls. Over one-fourth of the telephone numbers dialed were "not in service."

The survey team maintained a high level of motivation throughout the survey process, and successfully completed all surveys within the time period alotted. This was primarily attributable to an understanding of the mechanics of the survey process and support materials, an awareness of the importance and need for the data produced from the survey, and a realization of the significance of each individual in relation to the survey process as a whole.

Meetings contributed over meaningful dimensions aside from acquainting survey team members with the details of the assessment project. These included learning more about the internal operations, procedures, and programs of other educational agencies, experiencing a sharing of expertise in making suggestions regarding modifications of survey methods and materials, reinforcing or updating previous relationships, or establishing new ones and building a working team and a sense of camaraderie.

Supportive materials that required a minimum of time and effort to comprehend were developed and distributed to participants, and presented a logical, simple summary about the assessment project. This encouraged active participation, implemented the exchange of ideas, and enhanced the overall progress of the project.

Aside from the data produced from the assessment, other benefits were derived. Cooperation with a related agency resulted in increased communication and development of personal relationships, identification of specific information about potential clientele, possibility of the development of mutual federal or state grant proposals (funding guidelines have stressed cooperation and sharing of resources), avoidance of unnecessary duplication of effort concerning assessment studies and program development, and a change of attitude regarding "turf."

Survey Finds

INTRODUCTION

Using the techniques devised for the needs assessment resulted in the successful gathering of information that assisted in planning appropriate programs and services for the adult population living in a new service area of a community college.

Respondents were most often successfully contacted by interviewers during the week rather than weekends, with nearly half of the surveys completed from 5 p.m. to 9 p.m., and one-fourth from noon to 5 p.m.

Based on the survey findings, some conclusions are suggested that could be of value to those addressing similar problems concerning systematically identifying community needs. They are organized to reflect the major headings found in the survey interview form available in the appendix.

PERSONAL BACKGROUND INFORMATION

1. The personal characteristics relative to sex and race of respondents were pre-determined according to quota sampling criteria developed from U.S. Census Bureau Reports. The age composition of the adults was similar to those reported by the 1970 census, except for the 60 and over category. A definite shift in population occurred with a 10 percent increase in this age group, with over one-third of all respondents 60 years of age or older. The rapid in-migration of retired persons to the south Florida area is responsible for a large part of this growth. This is an important factor when planning appropriate delivery of programs and services for this significant group. Moreover, the impact of this 60 and over age group is felt throughout the survey findings. (Refer to Table 6).

CURRENT OCCUPATIONAL AND EDUCATIONAL STATUS

1. Half of the respondents were unemployed and were mostly housewives or retired. This group suggested a non-traditional approach to the delivery of service programs—one geared for those at home (eg., T.V., radio, newspaper). It was determined that retirees living in condominiums would probably require non-credit, "outreach" activities.

2. The educational levels achieved by respondents are reflected in three major categories. About one-fourth of the adults (probably the 60 and over age group) did not reach the 12th grade. Nearly half graduated from high school and received a diploma. Nearly one-third of the group completed from one to six years of college.

Considering the educational background of the adults, it would seem that both non-credit and credit programs would be considered of equal importance.

EDUCATIONAL PROGRAM INTERESTS AND GOALS

1. Only half of the adults interviewed expressed a desire to participate in an educational experience. Several factors could be attributed to this decision: 1. lack of motivation or awareness of opportunities available; 2. problems associated with aging; and 3. economic difficulties.

More effective recruitment and "p.r." efforts would seem advisable.

2. The two program areas most strongly indicated were two-year college transfer (one-tenth) and continuing education (one-third).

The most popular subject areas for the two-year college transfer program were liberal arts, law, or art.

In the continuing education area, most adults were interested in recreation and cultural enrichment activities and special training to upgrade job skills.

Aside from course content, particular attention should be directed toward developing a skilled faculty aware of "adult learners" and using flexible delivery systems that can include off-campus locations (on-the-job or condominiums) and courses via TV, radio, and newspaper.

PREFERRED CONDITIONS FOR LEARNING

1. Preferences regarding learning methods and "place to learn" reflect a traditional attitude. About one-fourth of the adults felt most comfortable with group discussion or lecture. The more common techniques relating to independent study ("Open College", courses by radio, TV, and newspaper) received little attention.

These non-traditional alternatives to learning appear to need greater visibility if they are to be considered by potential clientele.

A majority (one-fifth) of the group designated the community college as the most desirable place to learn, with an adult or vocational center in second place. Again, respondents reflected a more traditional orientation to learning with "learning at home" ranking third.

This traditional image of the "junior college" as opposed to the "community college" appears to prevail in the minds of community residents. There is a definite disparity between what we have done in the *past*, what we do *now*, and what we can do in the *future*. We need to transform our "community" college mission statement into a more *visible* action plan and program.

2. The time of day most selected to attend classes was evening (5-9 p.m.) followed by morning (9 a.m. to noon). Attending classes in the morning typifies the activity schedule of older adults, while evening hours would be more appropriate for younger age groups having more responsibilities during the day, with families and/or full-time employment.

3. Interestingly, most adults preferred to attend class for two or three hours per session, for 8 to 12 weeks, twice a week.

This clearly demonstrates a motivated person with commitment and seriousness of purpose toward a learning experience. (This may be a refreshing attitude for many college faculty dealing with a more traditional degree-bound clientele.)

PERCEIVED BARRIERS TO PROGRAMS OR SERVICES

Barriers that deterred participation in educational programs affected over one-third of the respondents.

People simply had other responsibilities with families and full-time employment. The barriers of health and attitude (e.g., "education is for the young") are probably most likely related to older respondents. While some barriers are difficult to remedy, two that were identified, lack of transportation and child care, could be addressed. An adequate rapid transit system in Broward County does not exist, and few day care centers are readily available in or near most educational sites. However, these might help solve the problems.

WHY NEEDS ASSESSMENT?

With evidence of budgets decreasing for postsecondary education, the needs assessment process will continue as a vital function for planners considering the increasing significance of accountability, evaluation, and the need to prioritize goals and objectives.

The value of agency cooperation and coordination toward common goals is obvious. The future depends on the leadership ability of the community college, the public school system, and other related agencies to join hands with their communities in order to assess human and educational needs, identify potential cleintele, remove access barriers to human and educational services, develop new avenues of approach to create and implement services, and demonstrate accountability to citizens.

This project resulted in a data base unique to Broward County. It employed the following general steps:

1. Resources were assessed. 2. Other assessment projects were reviewed. 3. A survey was established. 4. Meetings with key groups were conducted. 5. Research was designed. 6. Meetings were conducted after the survey's completion.

In order to maintain an up-to-date data base, it is suggested that a perpetual assessment cycle become a priority item. It should be built into agency budgets each year. Plans should be initiated to combine resources and efforts to maintain the momentum of community involvement in the process. Budgets need not represent actual dollars, but can reflect equally valuable "in-kind" contributions, such as the clerical support, or the survey interview staff.

This project has illustrated how two agencies systematically and effectively determined the educational preferences of a large segment of a fast-growing area of South Florida.

As a growing and enlightened public make increasing demands for services, it will be the responsibility of those agencies to make the best decisions possible to serve the needs of these people. In light of decreasing budgets on which to operate, priorities for services must be established. The best decisions are made when needs, resources, and priorities are examined are carefully evaluated.

The needs assessment process will continue to perform an essential function for educational agencies; it must not be overlooked in planning.

Collectively, community agencies have the resources to conduct assessment studies that could provide information to contribute significantly toward improving the quality of life for community

residents. The cost is low, the process is relatively simple, and the value is great. Put quite simply—when we have data that identify what services people need from us, and when we have the resources to deliver those services, we have the basic ingredients for success—serving our communities in the areas of their greatest need and most valuable asset—EDUCATION.

Appendix A

MAJOR COMMUNICATION METHODS AND MATERIALS OF THE NEEDS ASSESSMENT PROCESS

METHODS	MATERIALS
1. A master mailing list was developed to insure a comprehensive distribution of all materials associated with the needs assessment project	Memos indicated progress of the project. On occasion, forms were enclosed to confirm specific information, including a pre-addressed, postage-paid envelope (Refer to Appendix D).
2. The telephone was used for personal contact, follow-up between project, co-directors and Survey Team Members.	Telephone listing of business and home telephones of all Survey Team Members.
3. Meetings were held:	Memos announced all meetings.
Purpose	**Support materials distributed**
Orientation and introduction to proposed project	Orientation Packet (Refer to Appendix A).
Survey Team Member Field Test Team Orientation	Draft of Survey Team Member Packet and Survey Questionnaire form.
Survey Team Member Orientation	Revised Survey Team Member Packet (Refer to Appendix B) and Survey Questionnaire form (Refer to Appendix C).
Recognize Contributions of Survey Team Members	Invitations mailed mid-point of survey process. Certificates of Appreciation presented by the President of the College (Refer to Appendix E).
Share and discuss survey results	Preliminary Report, newspaper stories, related materials

4.	Tape recordings and Photographs documented all meetings to:	Casette tapes and a portable tape recorder were used.
	(1) maintain public relations/communication with project participants and local newspapers and	Black and white glossy photographs were taken by a photographer (supplied by the College) to accompany news releases to all local newspapers (Refer to Appendix E).
	(2) provide a permanent record of all proceedings	

Appendix B

SURVEY QUESTIONNAIRE

_____ CITY

(1) Dania
(2) Hallandale
(3) Hollywood
(4) Miramar
(5) Pembroke Pines
(6) Pembroke Park

_____ TIME

(1) 9 a.m.-noon weekday
(2) 9 a.m.-noon, weekend
(3) noon-5 p.m., weekday
(4) noon-5 p.m., weekend
(5) 5 p.m.-9 p.m. weekday
(6) 5 p.m.-9 p.m., weekend

1977 ASSESSMENT OF COMMUNITY NEEDS - EDUCATION

***Circle** response and **write** the number in the space provided.*

I. Personal Background Information

_____ Question #1. Sex

(1) Male
(2) Female

_____ Question #2. Would you mind telling me your age?

(1) 18-19
(2) 20-24
(3) 25-34
(4) 35-44
(5) 45-54
(6) 55-59
(7) 60 and over

_____ Question #3. How would you classify your race? *(read choices)*

(1) White
(2) American Indian
(3) Black
(4) Spanish Origin
(5) Asian

II. Educational Status

Question #5. What is the last year of school you completed?

_____

response (2 digit number)

High School

(01) 7 or below

(02) 8

(03) 9

(04) 10

(05) 11

(06) 12

Go To Question #6

College

(07) 1

(06) 2

(09) 3

(10) 4

(11) 5

(12) 6 or more

Go To Question #7

(If High School Category Ask:)

_____ Question #6. Did you receive a diploma?

_____

response

(0) Not applicable

(1) No

(2) Yes (traditional method)

(3) Yes, G.E.D. examination

(4) Yes, Adult education credit courses

(If College Category ask:)

_____ Question #7. Did you receive a degree?

_____
response

(0) Not applicable
(1) No
(2) Associate in Arts
(3) Associate in Science
(4) One year Certificate
(5) Business or Trade School
(6) Bachelor of Arts/Science/Business
(7) Master of Arts/Science/Business
(8) Doctor of Education/Philosophy
(9) Other (specify) _____

_____ Question #8. Is there anyone in your family that might be interested in getting a High School diploma at a local Adult Center?

(1) No *(skip to question #10)*
(2) Yes

_____ Question #9. What would be the method preferred in getting the diploma? *(read choices)*

(0) Not applicable
(1) Credit courses
(2) G.E.D. Examination

III. Educational Program and Subject Interests

_____ Question #10. Is there anything you would like to study or know more about?

(1) No *(skip to question 22)*
(2) Yes

NOTE: Information to complete question #11 (a three digit number) is included in the Survey Team Member packet.

_____ Question #11. What subject?

_____
response (3 digit number)

What is the main reason you are studying this subject?

_____
response

(Read choices if necessary:)

Check (v)

_____ Not applicable (Code: 000)

_____ Personal growth/development

_____ Upgrade or supplement job skills

_____ Certificates

_____ H.S. Diploma

_____ College Diploma

_____ Question #12. Is earning credit important?

_____
response

(0) Not applicable

(1) Yes

(2) No

IV. Preferred Conditions for Learning

_____ Question #13. If you were to attend class, what is the best *time of day* for you? *(record specific time)*

_____
response

(0) Not applicable

(1) Morning (8-12)

(2) Afternoon (12-5)

(3) Night (5-on)

_____ Question #14. Would you prefer classes or activities during the week, or on weekends?

_____
response

(0) Not applicable
(1) Week
(2) Weekends

_____ Question #15. What is the main reason?

_____
response

(0) Not applicable
(1) Family responsibilities
(2) Work schedule
(3) Transportation
(4) Need weekend activities
(5) Other _____

_____ Question #16. If you had your choice, *how long (in weeks)* should a class be?

_____
response

(0) Not applicable
(1) Less than one (1/2 day seminars/workshops)
(2) 1
(3) 2
(4) 4
(5) 6
(6) 8
(7) 10
(8) 12 or more
(9) No preference

_____ Question #17. How many *hours* should each *class session* last?

response

(0) Not applicable
(1) Less than one
(2) 1
(3) 1 1/2
(4) 2
(5) 2 1/2
(6) 3 or more

_____ Question #18. How many *times a week* should a class meet?

response

(0) Not applicable
(1) 1
(2) 2
(3) 3 or more

_____ Question #19. What is the best *way to learn* for you? *(Read examples)*

response

(0) Not applicable
(1) Independent study (t.v., radio, newspaper)
(2) Travel Study
(3) Lecture
(4) Group discussion
(5) Lab or Shop
(6) Other *(specify)* _____

_____ Question #20. What is the best *place for you* to learn?
(Read examples if necessary)

response

(0) Not applicable
(1) At home
(2) At my job
(3) Community College
(4) Public Schools
(5) Community School
(6) Adult/Vocational Center
(7) Church or Recreation Center

_____ Question #21. Why...any particular reason?

_____
response

(0) Not applicable
(1) Location
(2) "Atmosphere"
(3) Facilities
(4) Cost
(5) Quality of Instruction
(6) Other _____

V. Barriers to access to Programs and Services

_____ Question #22. Is there anything that makes it hard for you to participate in a class or special event?

(1) No *(Skip to Question #24)*
(2) Yes

_____ Question #23. What is the main reason?

_____
response

(00) Not applicable
(01) Not aware of programs, classes or services
(02) Lack of Transportation
(03) Cost of tuition or materials
(04) Job responsibilities
(05) Lack of time
(06) Programs, classes, or services not appealing
(07) Child Care
(08) Health
(09) Distance to travel
(10) Physically handicapped or impaired
(11) Not sure of admission requirements or procedures
(12) Not sure of costs involved
(13) Education is for the "young"
(14) Time courses, programs, and services offered not convenient
(15) Other _____

_____

Note: Question #24 is for respondents *60 and over ONLY*

_____ Question #24. If courses were offered at *no charge* or at a *special rate* to senior citizens, would you consider participating?

_____
response

(0) Not applicable
(1) No
(3) Yes

VII. Comments of Respondent

_____ Question #25. Do you have any suggestions concerning our survey, the Community College, Community Schools, Adult or Vocational Centers?

_____ Question #26. Would you like to be on our mailing list?

_____
name

_____
address zip

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